

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 6,836,581 B1  
APPLICATION NO. : 10/659987  
DATED : December 28, 2004  
INVENTOR(S) : Ping Xie et al.

Page 1 of 5

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 1

Line 30, change "portion" to --portions--  
Line 59, change "nukes" to --makes--

Column 2

Line 61, change "cording" to --combining--

Column 3

Line 1, change "cells" to --channels--  
Line 38, change "dispersions" to --dispersion--  
Line 63, change "wet" to --with--

Column 4

Line 5, change "adjust" to --adjustment--  
Line 55, change "chan" to --channels--

Column 6

Line 46, change "130,160" to --140,170--  
Line 56, change "  
Equation 3:  $\text{PhaseShift} \equiv 2\pi \frac{\Delta}{\lambda_0} \equiv 2\pi f \frac{\Delta L}{c}$ " to  
-- Equation 3:  $\text{PhaseShift} \equiv 2\pi \frac{\Delta L}{\lambda_0} \equiv 2\pi f \frac{\Delta L}{c}$  --

Column 7

Line 5, change "with" to --within--  
Line 12, change "chapels" to --channels--  
Line 26, change "experience" to --experiences--  
Line 31, change "multiplexes" to --multiples--  
Line 33, change "380°" to --360°--  
Line 41, change "experience" to --experiencing--

Column 8

Line 30, change "fat" to --fast--  
Line 48, change "diagram" to --diagrams--  
Line 51, before "this example" change "m" to --in--  
Line 54, change "cannel" to --channel--  
Line 63, change "show" to --shown--

Column 9

Line 1, change "filer" to --filter--  
Line 52, change "filter" to --further--

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Column 10

Line 1, change "pa" to --path--  
Line 6, after "Path 516 would" remove "in"  
Line 38, before "which split/combine" remove "may"  
Line 47, change "right" to --might--  
Line 55, after "stopbands" remove "of"  
Line 57, change "en" to --embodiment--

Column 11

Line 4, after "invention" insert --,-  
Line 7, after "coupling would" remove "for"  
Line 10, after "following" remove ".,"  
Line 12, change "sub stage" to --sub-stage--  
Line 36, change "cussed" to --discussed--  
Line 40, change "con cation" to --communication--  
Line 55, after "138 with the" change "re" to --remaining--

Column 12

Line 2, change "shows" to --shown--  
Line 12, change "fist" to --fast--  
Line 16, change "mad" to --and--  
Line 31, change "pats" to --paths--  
Line 52, change "sub-stages" to --sub-stage's--  
Line 60, change "charnel" to --channel--

Column 13

Line 9, change "shi" to --shift--  
Line 14, change "fill" to --full--  
Line 22, before "Table 2" remove ".,"  
Line 66, after "720, 740, 750" change "is" to --are--

Column 14

Line 18, after "fundamental cell" insert --,--  
Line 20, before "odd or even" change "at" to --adjacent--  
Line 39, change "sub stage" to --sub-stage--  
Line 46, change "sub stage" to --sub-stage--  
Line 53, change "transmit" to --transmits--

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Column 15

Line 25, after "polarization" change "was" to --axis--  
Line 27, change "bean" to --beam--  
Line 56, change "lights 140" to --light 1140--

Column 16

Line 11, change "fight" to --light--  
Line 13, after "polarization" change "as" to --axis--

Column 17

Line 23, change "my" to --may--  
Line 27, change "centered" to --cemented--  
Line 45, change "fist" to --first--  
Line 46, change "118-1182" to --1180-1182--

Column 18

Line 9, change "pt" to --path--  
Line 9, after "sum of" insert --the--  
Line 35, change "path" to --paths--  
Line 44, change "5A" to --8A--

Column 19

Line 1, change "born" to --beam--

Column 20

Line 2, before "axis" change "they" to --the y--  
Line 6, change "x" to --axis--  
Line 25, change "bean" to --beam--  
Line 30, change "fiction" to --function--  
Line 39, change "reflection" to --refraction--  
Line 52, change " $\theta_{52}$ " to -- $\theta_{S2}$ --  
Line 62, change "pats" to --paths--

Column 21

Line 13, after "plasma" insert --,--  
Line 13, change " $\theta_{P1}$ " to --  $\theta_{S1}$ --  
Line 31, change "pats" to --paths--  
Line 35, change "spectra" to --spectral--

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Column 22

Line 10, change "present" to --paths--  
 Line 11, change "fight" to --light--  
 Line 30, change "path" to --paths--  
 Line 31, change "pats" to --paths--  
 Line 45, change "rage" to --magnitude--  
 Line 50, change "Tis" to --This--  
 Line 60, change "stream" to --streams--  
 Line 62, after "substantially" insert --be--  
 Line 63, change "degree" to --degrees--  
 Line 63, after "substantially" insert --be--  
 Line 64, change "degree" to --degrees--  
 Line 67, after "substantially" remove "to"

Column 23

Line 17, change "Wave guide" to --Waveguide--  
 Line 44, change "thermal" to --thermally--  
 Line 48, change "bit" to --exhibit--  
 Line 50, change "charnels" to --channels--

Column 24

Line 8, change "pats" to --paths--  
 Line 20, change "pats" to --paths--  
 Line 26, change "f" to --of--  
 Table 3, change

"TABLE 3"

1	@1550 nm	vacuum	Air	BK7	SFS	Fused Silica	BaK1	LaSFN30
2	n	1	1.00027	1.50066	1.64329	1.44409	1.55517	1.77448
3	dn	0	0*	0.907465	1.407	13.7	0.066	2.293
4	$\frac{dn}{dt} \times 10^6$	0	0*	5.1	8.2	0.52	7.6	6.2

$\beta = \frac{dn}{dt} \times 10^6$

\*assuming constant volume

to

"TABLE 3"

1	@1550 nm	vacuum	Air	BK7	SFS	Fused Silica	BaK1	LaSFN30
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Column 25

Line 3, change "rows" to --row--  
Line 4, change "a" to --a--  
Line 11, change "L16=862" to --L16=2.862--  
Line 12, remove "is FIG. 2c"  
Line 37, change "harmonics" to --harmonic--  
Line 54, after " $\theta_{T1}$ " remove "it"

Column 26

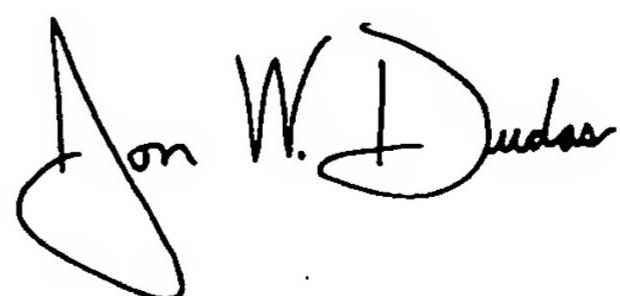
Line 8, change "1A" to --10A--  
Line 13, change "path Beans" to --path. Beams--  
Line 16, change "element" to --elements--  
Line 30, before "Equations" remove "equations"  
Line 40, change "lent" to --length--

Column 27

Line 2, change "se" to --serving--  
Line 4, change "bean" to --beam--  
Line 7, change " $\theta_{T1}, > \theta_{R2}$ " to -- $\theta_{T1} > \theta_{R2}$ --  
Line 12, change "Bach" to --Each--  
Line 31, change "able" to --example--

Signed and Sealed this

Fourteenth Day of October, 2008



JON W. DUDAS  
*Director of the United States Patent and Trademark Office*